CS447: Lecture Note (Lecture #5, September 5, 2023)

The agenda for CS447 lecture #5 (September 5, 2023).

1. **Distribute:**
   - (1) Attendance cards
   - (2) Project #1 handout

2. **Announcements**
   - (1) Quiz #3 is scheduled today (15 minutes at the end of today)
   - (2) Quiz #4 is scheduled on September 12th

3. **Project #1 introduction**
   - Firewalls and proxies
   - Web network traffic
     - Application Layer: HTTP (a stateless protocol)
     - Transport Layer: TCP (a stateful protocol)
     - Network Layer: IP (a stateless protocol)
   - HTTP network traffic
     - HTTP GET and HTTP responses (200 and 401)
     - Need for a multi-threaded design
   - Socket programming fundamentals
     - The client & server model
     - Socket APIs
- Project #1 required multi-threaded structure/implementation